

# S. J. McKee Archives



## Series I: Library Activities

<http://archives.brandonu.ca/en/permalink/descriptions2>

Part Of: Brandon University Photograph Collection

Description Level: Series

Series Number: I

Start Date: 1940

End Date: 2000

### Scope and Content:

This series contains three sub-series: Layouts & Furnishings, Receipt of Gifts, etc. and Archives. The first sub-series, Layouts and Furnishings, consists of photos of the Brandon College and University libraries from the 1940's to the present time. These photos highlight interesting areas of the library and include past and present library staff members. The second sub-series contains photos taken in the library during presentations of gifts, and other important events, such as the naming of the Robbins Library. The third sub-series contains photos taken in the McKee Archives, at its former location in the Jeff Umphrey Building, and since 1997, in its new location on the mezzanine floor of the John E. Robbins Library.



## Casselman survey - artifact catalogue

<http://archives.brandonu.ca/en/permalink/descriptions11722>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub sub series

Series Number: 1.1.4

Accession Number: 1-2010

GMD: textual records

Date Range: 2003

Physical Description: 264 pages

Material Details: PDF

History /

Biographical:

Artifact catalogue containing 597 records from the Casselman survey 2003.

Scope and Content:

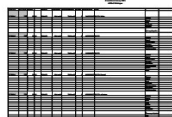
Spreadsheet containing information about the artifacts recovered, including: unit, level, artifact number, catalogue number, depth, co-ordinates, entry date, date recovered, count, weight, UTM co-ordinates, notes (excavators initials and comments) and artifact identification.

Name Access: Casselman survey - artifact catalogue

Subject Access: Archaeology  
Crepeele locale  
Casselman survey

### Documents

---



1.1.4\_Ca03\_artcat.pdf

 Read PDF

 Download PDF



## Casselman survey - summary information

<http://archives.brandonu.ca/en/permalink/descriptions11724>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.1.1  
GMD: multiple media  
Date Range: 2003  
Material Details: Field journals have been scanned in multi-page PDF files. Artifact catalogues are PDF files in spreadsheet format. Photographs are in jpeg format.

### History /

#### Biographical:

Archaeological testing began in the Crepeelee locale in May 2003 with a field crew of four members. James Graham supervised the crew and was assisted by Sarah Graham, Jollana Bishop, and Lisa Sonnenburg. Later additions to the testing team were Todd Kristensen, Michael Evans, and Emily Ansell.

The methodology for this survey used an arbitrary datum and a transit to establish a grid of 30 m intervals and a shovel test every 20 m. Materials were removed and screened to a minimum depth of 50 cm below surface. All recovered materials were bagged and removed to the lab for further analysis. All information including: test pit grid co-ordinates; UTM co-ordinates for each test pit; artifact presence; excavator; vegetation; aspect; paleosol; paleosol depth; and notes, were entered into a GIS database.

Approximately 600 shovel test pits were excavated and recorded in this fashion. Of the 600 shovel test pits, over 300 contained cultural materials. Based on the results of the Casselman survey several areas were designed for further testing and excavation. Crepeelee West and Crepeelee East were renamed the Sarah site DiMe-28) and Crepeelee 3 which became the Crepeelee site DiMe- 29.

#### Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Casselman survey - summary information  
Subject Access: Archaeology  
Crepeelee locale  
Casselman survey  
Casselman survey - summary information



## Crepeelee site 2004

<http://archives.brandonu.ca/en/permalink/descriptions11725>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.2.2  
Accession Number: 1-2010  
GMD: multiple media  
Date Range: 2004  
Material Details: Field journals have been scanned in multi-page PDF files. Artifact catalogues are PDF files in spreadsheet format. Photographs are in jpeg format.

### History /

#### Biographical:

The Crepeelee site was identified from the results of the Casselman survey and excavated in 2003. In 2004 the site was funded through the SCAPE project, directed by Bev Nicholson. The units were excavated by Crew Chief Tomasin Playford and crew.

Eight units were excavated in 2004, XU 1 to XU 8

The artifacts recovered from these eight excavations are faunal (animal bone), mainly bison, lithic materials (stone tools and flakes) and some ceramic (pottery). The artifact catalogue has 1258 records.

#### Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Crepeelee site 2004  
Subject Access: Archaeology  
Crepeelee locale  
Crepeelee site DiMe-29  
Crepeelee site 2004



## Crepeelee site 2005

<http://archives.brandonu.ca/en/permalink/descriptions11748>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.2.3  
Accession Number: 1-2010  
GMD: multiple media  
Date Range: 2005  
Material Details: Field journals have been scanned in multi-page PDF files. Artifact catalogues are PDF files in spreadsheet format. Photographs are in jpeg format.

### History /

#### Biographical:

The Crepeelee site was identified from the results of the Casselman survey and excavated in 2003 and 2004.

In 2005 the Brandon University Field School was held at both the Crepeelee and Graham sites in the Crepeelee locale. Denise Ens instructed the school and James Graham was teaching assistant.

At the Crepeelee site nine units were excavated (XU10-16 & 20, 21). Units 20 & 21 were referred to as Meadow in the notes but is considered part of the larger site based on recoveries. There are over 1,570 records in the catalogue. Faunal (animal bone), lithics, fire cracked rock, diagnostic lithics and ceramics were recovered from the site

The weather conditions during the field school were particularly difficult due to the rainfall and flooding of the roads and sites.

#### Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Crepeelee site 2005  
Subject Access: Archaeology  
Crepeelee locale  
Crepeelee site DiMe-29  
Crepeelee site 2005



## Crepeelee site 2007

<http://archives.brandonu.ca/en/permalink/descriptions11772>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.2.4  
Accession Number: 1-2010  
GMD: multiple media  
Date Range: 2007  
Material Details: Field journals have been scanned in multi-page PDF files. Artifact catalogues are PDF files in spreadsheet format. Photographs are in jpeg format.

### History /

#### Biographical:

The Crepeelee site was identified from the results of the Casselman survey and excavated in 2003, 2004 and 2005.

In 2007 the Brandon University Archaeology Field School was held at the Crepeelee site in the Crepeelee locale. Denise Ens instructed the school with Kate Decter & Jessica MacKenzie assistants.

Seventeen units were excavated XU30 - 46. Faunal (animal bone), lithics, fire cracked rock, diagnostic lithics and ceramics were recovered from the site. There are over 3050 records in the catalogue.

#### Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Crepeelee site 2007  
Subject Access: Archaeology  
Crepeelee locale  
Crepeelee site DiMe-29  
Crepeelee site 2007



## Lovstrom Block B - summary

<http://archives.brandonu.ca/en/permalink/descriptions12479>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub-series

Series Number: 3.3

Accession Number: 1-2010

GMD: multiple media

Date Range: 1987

History /

Biographical:

Block B consisted of 20 contiguous 1m<sup>2</sup> units excavated to 30 cm below surface. (except unit 58 which was excavated to 35 cm bs to obtain extended soil profile). The block is situated in recent oak and poplar forest at the head of a ravine leading to Jock's Creek, adjacent to an area cleared for market gardening. As was the case with Block A, the understory is heavily overgrown with hazelnut, chokecherry, saskatoon, and a poison ivy/sarsaparilla ground cover.

The soil levels below the sod in Block B consisted of a black, silty, and gritty loam layer from 5 cm to 23 cm below surface, a yellow and sandy clay from 23 cm to 30 cm below surface, and glacial till at 30 cm below surface. As in Block A, limestone cobbles were found throughout the occupation level around the bone. It is evident that bioturbation – primarily tree roots and rodent burrowing – have significantly altered patterns of original deposition of lithics, ceramics and small bone.

The faunal layer lay close to the surface, situated entirely in the black loam 5 cm – 23 cm below surface. The 23 cm depth also marked the end of the dark silty loam. At 10 cm below surface, a discernible patterning of the bone appeared. Concentrations of bone in narrow rows ran in an irregular pattern from the northwest to the southeast part of the block. This pattern was most apparent in the north end of the block which is the highest point in the block. In the same 1m<sup>2</sup> unit, patches of weathered, very poorly preserved bone would be found lying close to patches of well preserved bone. It is believed that this variability in preservation results from uneven rates of burial due to taphic activities of pocket gophers or other agents of bioturbation. The same pattern of uneven preservation occurs over much of the locale but is most evident in Block B.

Diagnostic lithics included eleven projectile points that were predominantly Plains or Prairie Side-notch types, but included two unnotched triangular points. Cord-wrapped impressed rim sherds and body sherds were recovered. The ceramics are variants of the Woodland Blackduck horizon.

RC dates: XU49 – 675/80 BP XU 59 – 705/75BP.

Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Lovstrom Block B - summary

Subject Access: Archaeology  
Lovstrom locale  
Lovstrom Block B



## Lovstrom Block C - summary

<http://archives.brandonu.ca/en/permalink/descriptions12517>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub-series

Series Number: 3.4

Accession Number: 1-2010

GMD: multiple media

Date Range: 1987

History /

Biographical:

Block C was situated in sparse oak forest with an understory of saskatoon, hazelnut and a thick ground cover of poison ivy and sarsaparilla. The block measured 3m and 3m and contained nine excavation units. All units were excavated to 35cm below surface. The soil horizons were much like the other blocks, except for a rusty brown stain in the first level, giving the upper black loam a mottled appearance. The brown patches were clay mixed with loam and were harder than the surrounding matrix. No definitive interpretation of these phenomena was attempted but this effect may be the result of natural brush or forest fires. Under the 5cm so d/humus (Ah) layer, the loam horizon extended approximately 5cm – 25 cm below surface, and averaged 20 cm thick. Bone was concentrated within this horizon between 10 cm – 20 cm below surface.

Block C was notable for its concentrations of articulated bison bone. Most noteworthy was an articulated unit composed of lumbar vertebrae, pelvis, and sacrum. Several thoracic vertebra/proximal rib end concentrations were also recovered. There were more vertebrae and rib sections recovered in the units in proportion to other bones. A few sherds, some debitage and a single Prairie Side-Notched point fragment were among the recoveries. Based on the quantity of bone, the density of the bone layer, and the articulated butchering units the area has been interpreted as a bone midden.

Faunal material was analysed by Jessica MacKenzie for her Honours Thesis: "A reconstruction of butchering processes in Block C from the Lovstrom site DjLx-1 in Southwestern Manitoba."

Radiocarbon date: 850/115BP XU 79.

Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Lovstrom Block C - summary

Subject Access: Archaeology  
Lovstrom locale  
Lovstrom Block C





## Graham site 2005

<http://archives.brandonu.ca/en/permalink/descriptions11904>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.4.2  
Accession Number: 1-2010  
GMD: multiple media  
Date Range: 2005  
Material Details: Field journals have been scanned in multi-page PDF files. Artifact catalogues are PDF files in spreadsheet format. Photographs are in jpeg format.

### History /

#### Biographical:

The Graham site is located south of the Crepeele site. Due to the close proximity the Graham and Crepeele sites have both been the site of the Brandon University Archaeological Field School.

In 2005 both sites were excavated as part of the Field School experience instructed by Denise Ens with teaching assistant James Graham Six units (XU 1-6) were excavated at the Graham site.

Recoveries included faunal (mostly bison), lithics (points, scrapers), and ceramics.

The Graham site was initially designated as a separate site early in the testing of the Crepeele locale due to what appeared to be a distinction between Early and Late Woodland ceramics. Subsequent testing has shown that this distinction was premature and that the cultural mosaic represented in the western section of the Crepeele locale does not readily separate in this manner.

#### Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and coordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Graham site 2005  
Subject Access: Archaeology  
Crepeele locale  
Graham site DiMe-30  
Graham site 2005



## Graham site 2006

<http://archives.brandonu.ca/en/permalink/descriptions11922>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.4.3  
Accession Number: 1-2010  
GMD: multiple media  
Date Range: 2006  
Material Details: Field journals have been scanned in multi-page PDF files. Artifact catalogues are PDF files in spreadsheet format. Photographs are in jpeg format.

### History /

#### Biographical:

The Graham site is located south of the Crepeele site. Due to the close proximity the Graham and Crepeele sites have both been the site of the Brandon University Archaeological Field School.

In 2006 a small Brandon University Archaeology Field School was conducted at the Graham site. Four excavations (XU 7, 8 15 & 16) were completed with Denise Ens Instructor and Jessica MacKenzie Teaching Assistant.

Recoveries included faunal (mostly bison), lithics and ceramics

The Graham site was initially designated as a separate site early in the testing of the Crepeele locale due to what appeared to be a distinction between Early and Late Woodland ceramics. Subsequent testing has shown that this distinction was premature and that the cultural mosaic represented in the western section of the Crepeele locale does not readily separate in this manner.

#### Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Graham site 2006  
Subject Access: Archaeology  
Crepeele locale  
Graham site DiMe-30  
Graham site 2006



## Graham site 2008

<http://archives.brandonu.ca/en/permalink/descriptions11957>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.4.4  
Accession Number: 1-2010  
GMD: multiple media  
Date Range: 2008  
Material Details: Field journals have been scanned in multi-page PDF files. Artifact catalogues are PDF files in spreadsheet format. Photographs are in jpeg format.

### History /

#### Biographical:

In 2008 Brandon University Archaeology returned to the Crepeelee locale to conduct further testing at the Graham and Crepeelee sites. Four units (XU 47-49 & 53) were excavated at Graham 2008 in order to collect samples and add further data to previous excavations. The usual excavation methodology was employed.

The small crew was directed by Bev Nicholson with Crew of Bill Foy, Andrew Lints & Kim Harrison

Recoveries included faunal (mostly bison), lithics and ceramics.

#### Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Graham site 2008  
Subject Access: Archaeology  
Crepeelee locale  
Graham site DiMe-30  
Graham site 2008



## Crepeelee locale Radiocarbon Dates

<http://archives.brandonu.ca/en/permalink/descriptions11966>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub-series  
Series Number: 1.5  
Accession Number: 1-2010  
GMD: textual records  
Date Range: 2003-2008  
Material Details: Radiocarbon date reports have been scanned in multi-page PDF files.

## History /

### Biographical:

The Crepeelee locale is located within the larger Lauder Sandhills area, located in southwestern Manitoba. The area is a complex region of high biodiversity made up of stabilized sand dunes and wetlands that encourage the development of mixed forest and grass prairie. This area provided a variety of subsistence resources for pre-European hunter-gatherers. At the present time the grass prairie is now farm land but the areas of vegetated sand dunes have not been cultivated and have revealed numerous pre-contact archaeological sites.

Archaeological surveying was conducted in 2003. The results of the 2003 Casselman survey showed over 300 test units contained cultural material and indicated several areas for further examination including the Crepeelee site DiMe-29, Sarah site DiMe-28 and Graham sites DiMe-30.

From 2003 to 2008 field work took place at the locale with 75 - 1m x 1m units excavated. The Crepeelee locale is a complex region of high biodiversity made up of stabilized sand dunes and wetlands that encourage the development of mixed forest and grass prairie. This area provided a variety of subsistence resources for pre-European hunter-gatherers. At the present time the grass prairie is now farm land but the areas of vegetated sand dunes have not been cultivated and have revealed numerous pre-contact archaeological sites.

To help establish the cultural sequence at the locale Radiocarbon dates were obtained from the three sites in the Crepeelee locale.

### Radiocarbon dating

The technique of radiocarbon dating was developed by Willard Libby and his colleagues at the University of Chicago in 1949.

Radiocarbon dating is used to estimate the age of organic remains from archaeological sites. Organic matter has a radioactive form of carbon (C14) that begins to decay upon death. C14 decays at a steady, known rate of a half life of 5,730 years. The technique is useful for material up to 50,000 years. Fluctuations of C14 in the atmosphere can affect results so dates are calibrated against dendrochronology. Radiocarbon dates are calibrated to calendar years.

Dates are reported in radiocarbon years or Before Present. Before Present refers to dates before 1950. The introduction of massive amounts of C14, due to atomic bomb and surface testing of atomic weapons, has widely increased the standard deviation on all dates after A.D. 1700 causing these dates to be unreliable.

Accelerated mass spectrometry can more accurately measure C14 with smaller samples and can date materials to 80,000 years.

### Scope and Content:

Sub series contains radiocarbon dates from: Crepeelee, Sarah and Graham sites.

Name Access:	Crepeelee locale Radiocarbon Dates
Subject Access:	Archaeology
	Crepeelee locale
	Crepeelee locale Radiocarbon Dates



## Graham site 2004

<http://archives.brandonu.ca/en/permalink/descriptions11967>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.4.1  
Accession Number: 1-2010  
GMD: multiple media  
Date Range: 2004  
Material Details: Field journals have been scanned in multi-page PDF files. Artifact catalogues are PDF files in spreadsheet format. Photographs are in jpeg format.

### History /

#### Biographical:

Graham units 9 and 14 were excavated with the Crepeele site in 2004 and were reassigned to the Graham site DiMe-30 keeping the same unit numbers. Tomasin Playford was crew chief in 2004.

The Graham site was initially designated as a separate site early in the testing of the Crepeele locale due to what appeared to be a distinction between Early and Late Woodland ceramics. Subsequent testing has shown that this distinction was premature and that the cultural mosaic represented in the western section of the Crepeele locale does not readily separate in this manner.

#### Scope and Content:

Sub-sub-sub series contains: Summary information of field methodology, number and co-ordinates of excavations, personnel and their staff position; Field journals are daily records of recoveries, features and activities at the site; Site records include excavation level and unit summaries, feature sheets, profiles; sample records and maps; Artifact catalogues are lists and identifications of all artifacts recovered; Photographs are of excavation units, features, the landscape and personnel.

Name Access: Graham site 2004  
Subject Access: Archaeology  
Crepeele locale  
Graham site DiMe-30  
Graham site 2004



## Crepeele locale Radiocarbon Report I

<http://archives.brandonu.ca/en/permalink/descriptions11968>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.5.1  
Accession Number: 1-2010  
GMD: multiple media  
Date Range: 2003-2008  
Physical Description: 3 pages  
Material Details: Radiocarbon date reports have been scanned in multi-page PDF files.

History /

Biographical:

Crepeele locale Radiocarbon Dates. C14 report by IsoTrace Laboratory for Crepeele site 2005 XU 8.

From 2003 to 2008 field work took place at the Crepeele locale with 75 - 1m x1m units excavated.

To help establish the cultural sequence at the locale Radiocarbon dates were obtained from the three sites in the Crepeele locale.

Radiocarbon dating

The technique of radiocarbon dating was developed by Willard Libby and his colleagues at the University of Chicago in 1949.

Radiocarbon dating is used to estimate the age of organic remains from archaeological sites. Organic matter has a radioactive form of carbon (C14) that begins to decay upon death. C14 decays at a steady, known rate of a half life of 5,730 years. The technique is useful for material up to 50,000 years. Fluctuations of C14 in the atmosphere can affect results so dates are calibrated against dendrochronology. Radiocarbon dates are calibrated to calendar years.

Dates are reported in radiocarbon years or Before Present. Before Present refers to dates before 1950. The introduction of massive amounts of C14, due to atomic bomb and surface testing of atomic weapons, has widely increased the standard deviation on all dates after A.D. 1700 causing these dates to be unreliable.

Accelerated mass spectrometry can more accurately measure C14 with smaller samples and can date materials to 80,000 years.

Scope and Content:

Sub sub series contains radiocarbon dates from: Crepeele, Sarah and Graham sites.

Name Access: Crepeele locale Radiocarbon Report I

Subject Access: Archaeology

Crepeele locale

Crepeele locale Radiocarbon Dates

## Documents

**IsoTrace Radiocarbon Laboratory**  
Accelerator Mass Spectrometry Facility  
at the University of Toronto

Sample: *Crepeele Black D suspension surrounding  
extensive bison skull/bone*

**Radiocarbon Analysis Report**  
Edition 26, 2018

Analyst: R. A. McKeen, Dept of Physics, Toronto, Ontario, Canada M5S 1A5

This report is a summary of the results of the analysis of the sample. The sample was analyzed for radiocarbon content and the results are reported in the table below. The sample was analyzed for radiocarbon content and the results are reported in the table below. The sample was analyzed for radiocarbon content and the results are reported in the table below.

Sample	Measurement	Result	Age
Crepeele Black D suspension surrounding extensive bison skull/bone	14C/12C ratio	0.0001234	1234 ± 50

The precision of the results of this analysis is ±50 years. In a normal, this date may not be reliable if the sample is contaminated.

*[Signature]*  
Dr. R. A. McKeen

1.5.1\_Crepeele05\_RC1  
4.pdf

[Read PDF](#)

[Download PDF](#)



## Crepelee locale Radiocarbon Report II

<http://archives.brandonu.ca/en/permalink/descriptions11969>

Part Of: RG 7 Beverley Nicholson fonds  
Description Level: Sub sub series  
Series Number: 1.5.2  
Accession Number: 1-2010  
GMD: multiple media  
Date Range: 2003-2008  
Physical Description: 8 pages  
Material Details: Radiocarbon date reports have been scanned in multi-page PDF files.

### History /

### Biographical:

Crepelee locale Radiocarbon Dates. C14 report by Beta Analytic Inc. for Crepelee site XU 48 and Graham site XU 54.

From 2003 to 2008 field work took place at the Crepelee locale with 75 - 1m x1m units excavated.

To help establish the cultural sequence at the locale Radiocarbon dates were obtained from the three sites in the Crepelee locale.

### Radiocarbon dating

The technique of radiocarbon dating was developed by Willard Libby and his colleagues at the University of Chicago in 1949.

Radiocarbon dating is used to estimate the age of organic remains from archaeological sites. Organic matter has a radioactive form of carbon (C14) that begins to decay upon death. C14 decays at a steady, known rate of a half life of 5,730 years. The technique is useful for material up to 50,000 years. Fluctuations of C14 in the atmosphere can affect results so dates are calibrated against dendrochronology. Radiocarbon dates are calibrated to calendar years.

Dates are reported in radiocarbon years or Before Present. Before Present refers to dates before 1950. The introduction of massive amounts of C14, due to atomic bomb and surface testing of atomic weapons, has widely increased the standard deviation on all dates after A.D. 1700 causing these dates to be unreliable.

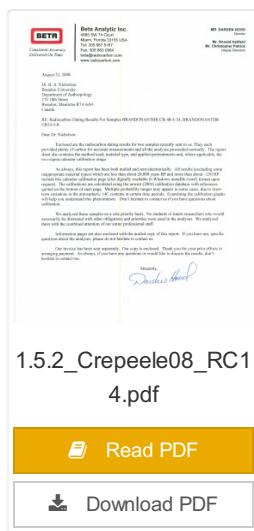
Accelerated mass spectrometry can more accurately measure C14 with smaller samples and can date materials to 80,000 years.

### Scope and Content:

Sub sub series contains radiocarbon dates from: Crepelee, Sarah and Graham sites.

Name Access: Crepelee locale Radiocarbon Report II  
Subject Access: Archaeology  
Crepelee locale  
Crepelee locale Radiocarbon Dates

### Documents



<http://archives.brandonu.ca/en/permalink/descriptions11970>

Material Details: Radiocarbon date reports have been scanned in multi-page PDF files.



## History /

### Biographical:

Crepeele locale Radiocarbon Dates. C14 report by Beta Analytic Inc. for Crepeele site XUs 8, 30, 50.

From 2003 to 2008 field work took place at the Crepeele locale with 75 - 1m x1m units excavated.

To help establish the cultural sequence at the locale Radiocarbon dates were obtained from the three sites in the Crepeele locale.

### Radiocarbon dating

The technique of radiocarbon dating was developed by Willard Libby and his colleagues at the University of Chicago in 1949.

Radiocarbon dating is used to estimate the age of organic remains from archaeological sites. Organic matter has a radioactive form of carbon (C14) that begins to decay upon death. C14 decays at a steady, known rate of a half life of 5,730 years. The technique is useful for material up to 50,000 years. Fluctuations of C14 in the atmosphere can affect results so dates are calibrated against dendrochronology. Radiocarbon dates are calibrated to calendar years.

Dates are reported in radiocarbon years or Before Present. Before Present refers to dates before 1950. The introduction of massive amounts of C14, due to atomic bomb and surface testing of atomic weapons, has widely increased the standard deviation on all dates after A.D. 1700 causing these dates to be unreliable.

Accelerated mass spectrometry can more accurately measure C14 with smaller samples and can date materials to 80,000 years.


### Scope and Content:

Sub sub series contains radiocarbon dates from: Crepeele, Sarah and Graham sites.

Name Access: Crepeele locale Radiocarbon Report III

Subject Access: Archaeology  
Crepeele locale  
Crepeele locale Radiocarbon Dates

## Documents





**BETA ANALYTIC INC.**  
13600 W. 31st Ave., Suite 100  
Westminster, CO 80033  
Tel: 303.427.4747 Fax: 303.427.4748  
www.betainc.com

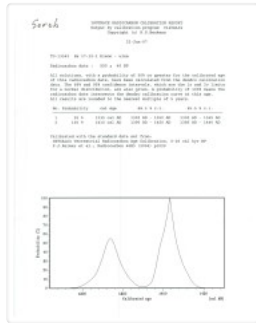
**REPORT OF RADIOCARBON DATING ANALYSES**  
Dr. R. A. Nicholson  
Report No.: 10112008  
Material Received: 10/11/2008

Sample ID	Material	13C (‰)	Conventional Radiocarbon Age (BP)
10112008-001	10112008-001	-25.1	100 ± 40
10112008-002	10112008-002	-25.1	100 ± 40
10112008-003	10112008-003	-25.1	100 ± 40
10112008-004	10112008-004	-25.1	100 ± 40
10112008-005	10112008-005	-25.1	100 ± 40
10112008-006	10112008-006	-25.1	100 ± 40
10112008-007	10112008-007	-25.1	100 ± 40
10112008-008	10112008-008	-25.1	100 ± 40
10112008-009	10112008-009	-25.1	100 ± 40
10112008-010	10112008-010	-25.1	100 ± 40

1.5.3\_Crepeele08\_RC1  
4.pdf

 Read PDF

 Download PDF



## Crepeelee locale Radiocarbon Report IV

<http://archives.brandonu.ca/en/permalink/descriptions11971>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub sub series

Series Number: 1.5.4

Accession Number: 1-2010

GMD: multiple media

Date Range: 2003-2008

Physical Description: 2 pages

Material Details: Radiocarbon date reports have been scanned in multi-page PDF files.

History /

Biographical:

Crepeelee locale Radiocarbon Dates. C14 report by IsoTrace Analytic Laboratory for Sarah site XU17.

From 2003 to 2008 field work took place at the Crepeelee locale. The Crepeelee, Graham and Sarah sites were excavated with 75 - 1m x1m units excavated

To help establish the cultural sequence at the locale Radiocarbon dates were obtained from the three sites in the Crepeelee locale.

Radiocarbon dating

The technique of radiocarbon dating was developed by Willard Libby and his colleagues at the University of Chicago in 1949.

Radiocarbon dating is used to estimate the age of organic remains from archaeological sites. Organic matter has a radioactive form of carbon (C14) that begins to decay upon death. C14 decays at a steady, known rate of a half life of 5,730 years. The technique is useful for material up to 50,000 years. Fluctuations of C14 in the atmosphere can affect results so dates are calibrated against dendrochronology. Radiocarbon dates are calibrated to calendar years.

Dates are reported in radiocarbon years or Before Present. Before Present refers to dates before 1950. The introduction of massive amounts of C14, due to atomic bomb and surface testing of atomic weapons, has widely increased the standard deviation on all dates after A.D. 1700 causing these dates to be unreliable.

Accelerated mass spectrometry can more accurately measure C14 with smaller samples and can date materials to 80,000 years.

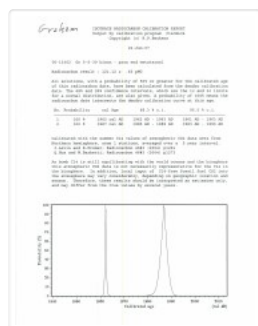
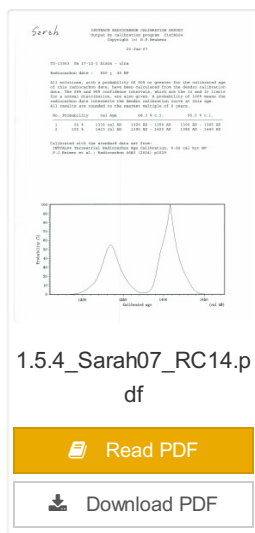
Scope and Content:

Sub sub series contains radiocarbon dates from: Crepeelee, Sarah and Graham sites.

Name Access: Crepeelee locale Radiocarbon Report IV

Subject Access: Archaeology  
Crepeelee locale  
Crepeelee locale Radiocarbon Dates

Documents



## Crepeele locale Radiocarbon Report V

<http://archives.brandonu.ca/en/permalink/descriptions11972>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub sub series

Series Number: 1.5.5

Accession Number: 1-2010

GMD: multiple media

Date Range: 2003-2008

Physical Description: 2 pages

Material Details: Radiocarbon date reports have been scanned in multi-page PDF files.

Biographical:

Crepeele locale Radiocarbon Dates. C14 report by IsoTrace Analytic Laboratory for Graham site XUs 5 and 8.

From 2003 to 2008 field work took place at the Crepeele locale. The Crepeele, Graham and Sarah sites were excavated with 75 - 1m x1m units excavated

To help establish the cultural sequence at the locale Radiocarbon dates were obtained from the three sites in the Crepeele locale.

## Radiocarbon dating

The technique of radiocarbon dating was developed by Willard Libby and his colleagues at the University of Chicago in 1949.

Radiocarbon dating is used to estimate the age of organic remains from archaeological sites. Organic matter has a radioactive form of carbon (C14) that begins to decay upon death. C14 decays at a steady, known rate of a half life of 5,730 years. The technique is useful for material up to 50,000 years. Fluctuations of C14 in the atmosphere can affect results so dates are calibrated against dendrochronology. Radiocarbon dates are calibrated to calendar years.

Dates are reported in radiocarbon years or Before Present. Before Present refers to dates before 1950. The introduction of massive amounts of C14, due to atomic bomb and surface testing of atomic weapons, has widely increased the standard deviation on all dates after A.D. 1700 causing these dates to be unreliable.

Accelerated mass spectrometry can more accurately measure C14 with smaller samples and can date materials to 80,000 years.

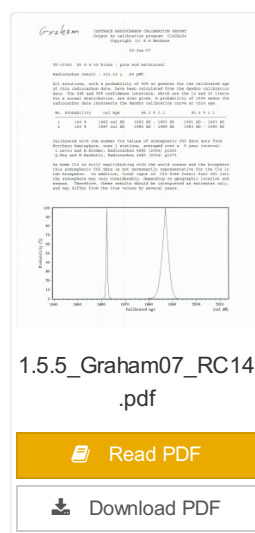
### Scope and Content:

Sub sub series contains radiocarbon dates from: Crepeele, Sarah and Graham sites.

Name Access: Crepeele locale Radiocarbon Report V

Subject Access: Archaeology  
Crepee locale  
Crepee locale Radiocarbon Dates

## Documents





## ARCH 2: North Lauder locale

<http://archives.brandonu.ca/en/permalink/descriptions12079>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Series

Series Number: 2

Accession Number: 1-2010

GMD: multiple media

Date Range: 1997 to present

History /

Biographical:

### ARCH 2: North Lauder Locale

The North Lauder locale has a long archaeological and geological history that is important for understanding the forces that shaped the region. Archaeological research in the locale shows that the area has been occupied by humans for at least the past 6,500 years. Environmental forces provided an area of diverse resources that attracted early peoples.

#### Environment of the Lauder Sandhills

The North Lauder locale is part of the greater Lauder Sandhills area. The glaciers that covered this region began to recede approximately 11,000 years ago leaving a large lake known as glacial Lake Hind. The Souris River, the Lauder Sandhills and the Oak Lake Aquifer are remnants of the environmental and geological forces that shaped the region.

The Lauder Sandhills region is characterized by a landscape of sand sheets and stabilized sand dunes interspersed with a variety of wetlands. This complex topographic and hydrological situation favoured the development of an island mosaic of mixed forest, wetland and meadow, surrounded by mixed grass prairie. The result was a large, isolated ecotone which provided a rich variety of subsistence resources for hunter-gatherers.

#### Research in the Lauder Sandhills

Archaeologists from Brandon University have been conducting research in the Lauder Sandhills since 1991. Research in the North Lauder locale has focused on the Atkinson site, a 6,500 year old hunter-gatherer site and Flintstone Hill.

#### The Atkinson site

The Atkinson site is one of the oldest excavated sites in Manitoba and has been Radiocarbon dated to 6,500 years before present. The Atkinson site is located on the bank of the Souris River and was discovered when a hearth (fire pit) was seen eroding out of the bank. Based on the date of the site and the kind of lithics (stone tools) present it is considered a Gowen occupation. The Atkinson site is evidence that bison hunters were active on the northern plains at a very early date. Similar sites have also been found on the High Plains in the U.S. and are referred to as the Mummy Cave Complex.

The Atkinson Site is of great importance as it is the first undisturbed site of this type to be excavated in Manitoba and extends the range of these sites south and east from the type-sites in central Saskatchewan.

#### Flintstone Hill

The geomorphology of the glacial Lake Hind Basin over the past 11,000 years is known primarily through the study of a cut bank along the Souris River. Flint Stone Hill contains the most complete stratigraphic record for the post-glacial period on the northern plains. The site

has been extensively studied by geoarchaeologists, geologists and paleoenvironmentalists over many years and their findings have contributed to our understanding of the region.

The North Lauder locale Borden designations of Atkinson site DiMe-27 and Flintstone Hill site DiMe-26.

#### Borden System

Archaeological sites in Canada are identified by the Borden system, which is a uniform site designation system. The country is divided into grids based on latitude and longitude in blocks of 10 x 20 minutes. The first 4 letters indicate the block and the following numbers indicate the actual site. For example the area of the Lauder Sandhills in southwestern Manitoba is identified by the letters DM and the North Lauder locale within that area is DiMe. The Atkinson site is DiMe-27 and the Flintstone Hill site DiMe-26. As new sites are discovered they will be numbered sequentially.

#### Scope and Content:

The Series has been divided into two sub-series, including (1) Atkinson site DiMe-27 and Flintstone Hill site DiMe-26.

Name Access:           North Lauder locale  
Subject Access:        Archaeology  
                              Atkinson site DiMe-27

#### Arrangement:

Series is arranged by site and by year of field work.



## Atkinson site - DiMe-27

<http://archives.brandonu.ca/en/permalink/descriptions12080>

Part Of: RG 7 Beverley Nicholson fonds

Description Level: Sub-series

Series Number: 2.1

Accession Number: 1-2010

GMD: multiple media

Date Range: 2003-2006

History /

Biographical:

The Atkinson site was named for the landowners Ken and Karen Atkinson who were very helpful to the archaeology and geoarchaeology crews that worked at the site. Their support made the project possible.

The Atkinson site story begins with the discovery of a charcoal lens eroding from the north bank of the Souris River in the summer of 2002. Study of Cultural Adaptations on the Prairie Ecozone (SCAPE) project geoarchaeologist Dr. Garry Running was exploring the stratigraphic layering in the bank when he noted the lens and reported it to Dr. Bev Nicholson. Upon closer examination, a tiny pressure flake was observed on the lens exposure and it was decided to collect a charcoal sample for radiocarbon dating.

The resulting date of 5250B.P cal. 4225 B.C. placed the site in the early Archaic period. A second date on bone collagen of 5580B.P. cal. 4500 B.C. confirmed the earlier date and gave an averaged date of circa 4400 B.C or 6,500 years ago.

The Atkinson site is one of the oldest excavated sites in Manitoba. Based on the date of the site and the kind of lithics (stone tools) present it is considered a Gowen occupation. The Atkinson site is evidence that bison hunters were active on the northern plains at a very early date. Similar sites have also been found on the High Plains in the U.S. and are referred to as the Mummy Cave Complex.

The Atkinson Site is of great importance as it is the first undisturbed site of this type to be excavated in Manitoba and extends the range of these sites south and east from the type-sites in central Saskatchewan. Based on the date and sample evidence further excavations were conducted by Dr. Nicholson's team. in 2003, 2004 and 2006.

Scope and Content:

Sub series has been divided into three sub sub series including: (1) Atkinson 2003, (2) Atkinson 2004; (3) Atkinson 2006

Name Access: Atkinson site DiMe-27

Subject Access: Archaeology  
North Lauder locale  
Atkinson site DiMe-27